

CLAIMS:

1. A step of amplifying an RNA derived from HIV-1, which comprises synthesizing a cDNA by the action of an RNA-dependent DNA polymerase by using a specific sequence in
5 an RNA derived from HIV-1 anticipated in a sample as a template, a first primer containing a sequence complementary to the specific sequence and a second primer containing a sequence homologous to the specific sequence (either of which additionally has a promoter
10 sequence for the RNA polymerase at the 5' end), denuding the cDNA to a single-stranded DNA through degradation of the RNA in the resulting RNA-DNA double strand by ribonuclease H, forming a double-stranded DNA having a promoter sequence which can be transcribed into an RNA
15 consisting of the specific base sequence or a sequence complementary to the specific base sequence by using the single-stranded DNA as a template by the action of a DNA-dependent DNA polymerase, and then transcribing the double-stranded DNA into an RNA transcript, which acts as
20 a template in the subsequent cDNA synthesis by the RNA-dependent DNA polymerase, in the presence of the RNA polymerase, wherein the first primer is an oligonucleotide of any one of SEQ ID NOS:1 to 7, and the second primer is an oligonucleotide of any one of SEQ ID
25 NOS:8 to 20.
2. The step according to Claim 1, which further comprises adding a third oligonucleotide which is complementary to

a region of the RNA derived from HIV-1 which flanks the
5' end of the specific sequence with an overlap (of from
1 to 10 bases) with the specific sequence to form a
template used in the initial stage of the amplification
5 by cutting the RNA derived from HIV-1 at the 5' end of
the specific sequence (by the action of the rebonuclease
H), wherein the first primer is an oligonucleotide of any
one of SEQ ID NOS:1 to 7, and

(1) the second primer is an oligonucleotide of SEQ ID
10 NO:8, and the third oligonucleotide is an
oligonucleotide of any one of SEQ ID NOS:21 and 22,

(2) the second primer is an oligonucleotide of SEQ ID
NO:9, and the third oligonucleotide is an
oligonucleotide of any one of SEQ ID NOS:22 to 26,

15 (3) the second primer is an oligonucleotide of SEQ ID
NO:10, and the third oligonucleotide is an
oligonucleotide of any one of SEQ ID NOS:22 to 28,

(4) the second primer is an oligonucleotide of SEQ ID
NO:11, and the third oligonucleotide is an

20 oligonucleotide of any one of SEQ ID NOS:22 to 29,

(5) the second primer is an oligonucleotide of SEQ ID
NO:12, and the third oligonucleotide is an
oligonucleotide of any one of SEQ ID NOS:22 to 29,

(6) the second primer is an oligonucleotide of SEQ ID
25 NO:13, and the third oligonucleotide is an
oligonucleotide of any one of SEQ ID NOS:23 to 30,

(7) the second primer is an oligonucleotide of SEQ ID

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NO:14, and the third oligonucleotide is an
oligonucleotide of any one of SEQ ID NOS:23 to 30,
(8) the second primer is an oligonucleotide of SEQ ID
NO:15, and the third oligonucleotide is an
5 oligonucleotide of any one of SEQ ID NOS:24 to 30,
(9) the second primer is an oligonucleotide of SEQ ID
NO:16, and the third oligonucleotide is an
oligonucleotide of any one of SEQ ID NOS:25 to 30,
(10) the second primer is an oligonucleotide of SEQ ID
10 NO:17, and the third oligonucleotide is an
oligonucleotide of any one of SEQ ID NOS:27 to 31,
(11) the second primer is an oligonucleotide of SEQ ID
NO:18, and the third oligonucleotide is an
oligonucleotide of any one of SEQ ID NOS:31 and 32,
15 (12) the second primer is an oligonucleotide of SEQ ID
NO:19, and the third oligonucleotide is an
oligonucleotide of any one of SEQ ID NOS:32 and 33, or
(13) the second primer is an oligonucleotide of SEQ ID
NO:20, and the third oligonucleotide is an
20 oligonucleotide of SEQ ID NO:33.

3. A step of detecting HIV-1, which comprises conducting
the step as defined in Claim 1 or 2 in the presence of an
oligonucleotide probe (having a sequence different from
those of the first primer and the second primer) which
25 can specifically bind to the RNA transcript resulting
from the amplification and is labeled with an fluorescent
intercalative dye, and measuring the change in the

fluorescence from the reaction solution.

4. The step according to Claim 3, wherein the oligonucleotide probe is designed to hybridize with at least part of the RNA transcript and alters its
- 5 fluorescence upon hybridization.
5. The step according to Claim 4, wherein the oligonucleotide probe has a sequence consisting of or complementary to at least 10 consecutive bases in SEQ ID NO:34.

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